

SECTION 09680

CARPET

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
1. Tufted carpet.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance. Include installation recommendations for each type of substrate required.
- B. Shop Drawings: Show the following:
1. Carpet type, color, and dye lot.
 2. Seam locations, types, and methods.
 3. Transition details to other flooring materials.
- C. Samples: For each of the following products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.
1. Carpet: 12-inch- (300-mm-) square Sample.
- D. Product Schedule: Use same room and product designations indicated on Drawings and in schedules.
- E. Maintenance Data: For carpet to include in maintenance manuals specified in Division 1. Include the following:
1. Methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
 2. Precautions for cleaning materials and methods that could be detrimental to carpet.
- F. CRI Labels: Provide data or certificates showing the carpet and adhesives meet the requirements of CRI Indoor Air Quality Carpet and Adhesive Testing Programs.
- G. MSHA Submittals:
1. Indoor Environmental Quality: R 4: If carpet is installed it must meet CRI low emission test standard.
 2. Carpet must meet HUD - UM44d requirement.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who is certified by the Floor Covering Installation Board or who can demonstrate compliance with its certification program requirements.
- B. Fire-Test-Response Characteristics: Provide products with the critical radiant flux classification indicated in Part 2, as determined by testing identical products per ASTM E 648 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.
- C. Product Options: Products and manufacturers named in Part 2 establish requirements for product quality in terms of appearance, construction, and performance. Other manufacturers' products comparable in quality to named products and complying with requirements may be considered. Refer to Division 1 Section "Product Requirements."

1.4 DELIVERY, STORAGE, AND HANDLING

- A. General: Comply with CRI 104, Section 5, "Storage and Handling."

1.5 PROJECT CONDITIONS

- A. General: Comply with CRI 104, Section 6.1, "Site Conditions; Temperature and Humidity."
- B. Environmental Limitations: Do not install carpet until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- C. Do not install carpet over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet manufacturer.
- D. Where demountable partitions or other items are indicated for installation on top of carpet, install carpet before installing these items.

1.6 WARRANTY

- A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Special Carpet Warranty: Written warranty, signed by carpet manufacturer agreeing to replace carpet that does not comply with requirements or that fails within specified warranty period. Warranty does not include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, and delamination.
 - 1. Warranty Period: 10 years from date of Substantial Completion.

1.7 EXTRA MATERIALS

- A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Carpet: Full-width rolls equal to 5 percent of amount installed for each type indicated, but not less than 10 sq. yd. (8.3 sq. m).

PART 2 - PRODUCTS

2.1 CARPET

- A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Product: "Assertion III" Textured Loop Carpet as manufactured by J & J Commercial Carpet Mills.
- B. Fiber Content: 88% Xylon Protection plus Advanced Generation Olefin 12% Nylon Styling Yarns.
- C. Dye Method: Colorloc Plus - Solution Dyed
- D. Face Construction: Dense Pattern Loop.
- E. Gauge: 1/8
- F. Stitches: 8 per inch.
- G. Thickness: .124 inch.
- H. Surface Pile Weight: 26 oz./sq. yd..
- I. Primary Backing: Polypropylene.
- J. Secondary Backing:
 - 1. ActionBac and cushion over wood floors.
 - 2. Endure Plus - Enhancer polyurethane backing over concrete floors.
- K. Width: 12 feet
- L. Performance Characteristics: As follows:
 - 1. Pill Test: CPSC-FF-1-70 (ASTM D2859) passes
 - 2. Flooring Radiant Panel: NFPA-253 (ASTM E648) Direct Glue Down Mode – Class 1
 - 3. NBS Smoke Chamber: NFPA-258 (ASTM E662) Flaming Mode – 450 or less
 - 4. Static Propensity: 3.5 KV or less.

2.2 CARPET OPTION

- A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Product: Something Special Series - "Endless Naturals" Textured Loop Carpet as manufactured by Aladdin Carpet Mills.
- B. Fiber Content: 88% Xylon Protection plus Advanced Generation Olefin 12% Nylon Styling Yarns.
- C. Dye Method: Olefin - Solution Dyed / Nylon - Space Dyed / 4-ply Color combination
- D. Face Construction: Dense Pattern Loop.
- E. Gauge: 5/32
- F. Stitches: 5 per inch.
- G. Thickness: .187 inch.
- H. Surface Pile Weight: 26 oz./sq. yd..
- I. Primary Backing: Polypropylene.
- J. Secondary Backing:
 - 1. ActionBac and cushion over wood floors.
 - 2. Duralon attached cushion, polyurethane backing over concrete floors.
- K. Width: 12 feet
- L. Performance Characteristics: As follows:
 - 1. Pill Test: CPSC-FF-1-70 (ASTM D2859) passes
 - 2. Flooring Radiant Panel: NFPA-253 (ASTM E648) Direct Glue Down Mode – Class 1
 - 3. NBS Smoke Chamber: NFPA-258 (ASTM E662) Flaming Mode – 450 or less
 - 4. Static Propensity: 3.5 KV or less.

2.3 CARPET CUSHION

- A. Polyurethane-Foam Cushion: Bonded.
 - 1. Thickness: 3/8 inch. (3/16 inch at Barrier Free units)
 - 2. Density: 2.2 lb/cu. ft.
- B. Carpet cushion not required for enhancer backing.

2.4 INSTALLATION ACCESSORIES

- A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided by or recommended by the following:
 - 1. Carpet manufacturer.

- B. Adhesives: Water-resistant, mildew-resistant, nonstaining type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet and that is recommended by carpet manufacturer.
 - 1. VOC Limits: Provide adhesives that comply with the following limits for VOC content when tested according to ASTM D 5116:
 - a. Total VOCs: 10.00 mg/sq. m x h.
 - b. Formaldehyde: 0.05 mg/sq. m x h.
 - c. 2-Ethyl-1-Hexanol: 3.00 mg/sq. m x h.
- C. Seaming Cement: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.
 - 1. VOC Limits: Provide adhesives that comply with the following limits for VOC content when tested according to ASTM D 5116:
 - a. Total VOCs: 10.00 mg/sq. m x h.
 - b. Formaldehyde: 0.05 mg/sq. m x h.
 - c. 2-Ethyl-1-Hexanol: 3.00 mg/sq. m x h.
- D. Primer: Provide products recommended by carpet manufacturer. Provide primer that is compatible with adhesive.
- E. Transition Strips: Refer to Division 9 section "Resilient Tile Flooring".

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Verify that substrates and conditions are satisfactory for carpet installation and comply with requirements specified.
- B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:
 - 1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond.
 - 2. Verify that adhesion and dryness characteristics have been determined as required in Division 7 Section "Vapor Retarders, Vapor Barriers, and Air Barriers" and meet flooring manufacturer's recommendations.
 - a. If alkaline content is greater than 9, or is such that it may cause future delaminating of the carpet, per manufacturer's printed instructions, coordinate with General Contractor for the application of carpet manufacturer's recommended primer, adhesives and seam sealers.
 - 3. Subfloor finishes comply with requirements specified in Division 3 Section "Cast-in-Place Concrete" for slabs receiving carpet.
 - 4. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.
- C. For wood subfloors, verify the following:
 - 1. Underlayment over subfloor complies with requirements specified in Division 6 Section "Rough Carpentry."

2. Underlayment surface is free of irregularities and substances that may interfere with adhesive bond or show through surface.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. General: Comply with CRI 104, Section 6.2, "Site Conditions; Floor Preparation," and carpet manufacturer's written installation instructions for preparing substrates indicated to receive carpet installation.
- B. Cut carpet bails open to full length of rolls to allow the carpet to ventilate a minimum of 72 hours prior to installation.
- C. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill minor cracks, holes, and depressions in substrates.
- D. Coordinate with General Contractor for the removal of coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents.
- E. Broom and vacuum clean substrates to be covered immediately before installing carpet. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 INSTALLATION

- A. Direct-Glue-Down Installation: Install carpet in strict accordance with the Carpet and Rug Institute's IAQ (indoor air quality) Installation guidelines as well as with the U.S. Environmental Protection Agency's guidelines. Install carpet in accordance with the recommendations in CRI 104 and the carpet manufacturer's specifications.
- B. Stretch-in Installation: Comply with CRI 104, Section 11, "Stretch-in Installation."
- C. Comply with carpet manufacturer's written recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.
- D. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.
- E. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
- F. Install pattern parallel to walls and borders.

3.4 CLEANING AND PROTECTION

- A. Perform the following operations immediately after installing carpet:
 - 1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
 - 2. Remove yarns that protrude from carpet surface.
 - 3. Vacuum carpet using commercial machine with face-beater element.
- B. Protect installed carpet to comply with CRI 104, Section 15, "Protection of Indoor Installations."
- C. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer.

3.5 BUILDING VENTILATION

- A. Operate the building ventilation systems at maximum outdoor air flow before, during and 72 hours after the new carpet installation. Open windows and/or doors when possible during the carpet installation.

3.6 WASTE MANAGEMENT

- A. Separate waste in accordance with the Waste Management Plan. Set aside and protect offcuts and remainder greater than 1 sq. yd, for reuse by owner or nonprofit organization such as Habitat for Humanity.
- B. Close and seal tightly all partly used adhesive containers and store protected in well-ventilated, fire-safe area at moderate temperatures.

END OF SECTION